タンペレ応用科学大学との交流報告

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只浦　寛子[1)]、北岡　晃子[1)]、馬渡　尚憲[2)]

1）宮城大学看護学部　2）宮城大学（理事長）

フィンランドのタンペレ応用科学大学と本学の一般協定が締結され、平成22年９月２日タンペレ応用科学大学にて締結式が開催された。これに伴い、タンペレ応用科学大学看護学部と本学看護学部間において補足協定を締結し、平成24年度より本学にて開講予定の「実践看護英語演習」への協力を得ることとなった。また平成22年９月３日、タンペレ応用科学大学と本学看護学部との合同シンポジウムを開催した。本学より馬渡尚憲理事長、ティモシー・フェラン国際センター教授、看護学部からは長澤治夫教授、関戸好子教授、北岡晃子准教授、只浦寛子准教授、筆者（吉田教授）の５名が参加したので、概要について報告する。

馬渡尚憲学長と看護学部教員

１．タンペレ応用科学大学の概要

タンペレ応用科学大学は、フィンランドの首都ヘルシンキの北西160kmに位置するタンペレ市にあり、学生総数は約１万人、７つの専門分野、45のDegree Programのうち、８つの英語コースを有している。看護学部は、学生数は各学年200名であり、英語コースには、20名が在籍しており、教育期間は3．5年である。本学で平成24年度より行う「実践看護英語演習」でのカリキュラムでは、この英語コースの一部に参加する形になることが予想される。看護学部の基本的な教育内容において、わが国との相違はないが、職業参加による単位取得として60単位まで認めているなど、Practiceを中心に教育をしている。また修士への進学には、卒業後に３年の社会参加を義務付けている。またフィインランドでは看護師免許取得に関する資格試験はなく、卒業と同時にEU圏での看護師免許を取得できる教育体制となっており、英語コースでは、他国から多くの看護師希望者を受け入れている。

英語クラスの授業風景

タンペレ応用科学大学では、教育研究に関して積極的に産学連携を進め、R&D（Research and Development）部門を設け、Digital Services and Technologies, Experience Services, Future Machinery and Systems, Service and Network and Product Development PractiCo, Good Living Environment, Well-being Services and Technology の各分野を置き、連携をすすめている。

大学付設であるITSE（Facilities for Independent Coping）では、企業との共同研究、特にディバイス分野での共同開発を実施しており、50－60の会社が参加し様々な試験やディバイスへの開発支援を行っている。また、温水プールなどのリハビリ施設は併設されており、市民（慢性疾患や整形疾患患者を含む）が参加して、高齢者や成人、小児など様々な対象にリハビリプログラムを実施し、同時に開発機器を用いた実証研究を行っている。また2010年に開設されたNew Sleeping Centerでは、よい眠りに関する研究開発センターとして、睡眠時無呼吸症候群への研究などの分野で企業との共同開発をすすめている。

2． 施設見学

臨床施設では、実践看護英語演習で学生が実習等行うことが予測される、タンペレ大学病院（Eye Center）、ピルカンマホスピス、高齢者施設の３施設を見学し、施設看護管理者より現在の状況を伺った。

タンペレ大学病院（Eye Center）では、わが国と同様、在院日数の短縮化が行われており、日帰り手術などの増加に対応している。専門看護師など特定の資格制度はないが、病院独自での資格制度を設けており、臨床経験豊富な看護師に、入院時情報収集、入院時検査、投薬量のコントロール（指示は医師）を含み注射、投薬などの管理をまかせるシステムを導入しているとのことであった。医療にはフィンランド語を使用しており、フィンランド語のスキルは求めるが、高齢者でも英語が堪能な患者が多く、高齢者との会話は英語でも可能である。また、フィンランドでは女性の90％が就業しており、子育て期間なども様々な支援を受けて勤務している。

ピルカンマホスピスは、1985年に初めてタンペレにできたホスピスである。タンペレ全体では、現在４つのホスピスがあり、対象患者は、末期がん患者が主であり、在院期間は３週間以内が62％から70％であり、プライマリーナース制度を導入している。また積極的にボランティアを活用し、ボランティアには、活動前に患者理解にむけた教育を実施している。

Senior Home Subantopustoは、高齢者施設で、家庭にいるような環境のもと、看護師、理学療法士などのスタッフにより運営されており、またフィットネスやサウナなどの設備を備えている。フィンランドでは高齢者は一人暮らしになることが多く、若い世代は高齢者との同居はほとんどしないとのことであった。上層

階には、ケア付きのコンドミニアムがあり、一定額以上は税金による費用負担で、比較的安く入居可能となっていた。

３．補足協定調印

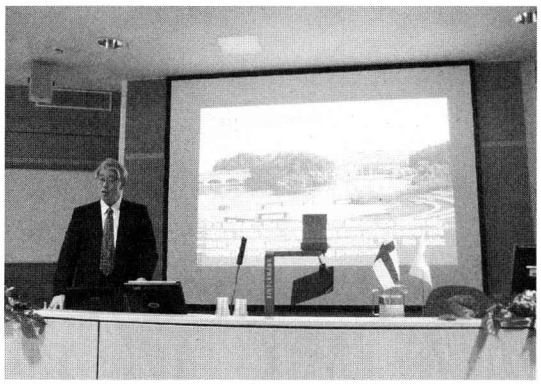
９月２日、タンペレ応用科学大学Markku Lahtinen学長と、本学馬渡理事長による一般協定締結後、看護学部間の補足協定調印が行われた。タンペレ応用科学大学はPäivi Karttunen副学長、本学看護学部は、桑名佳代子学部長（代理出席　長澤治夫副学部長、吉田俊子副学部長）による署名を行い、協定を無事締結した。本協定を踏まえ、今後、平成24年度に開講する「実践看護英語演習」の具体的な教育内容の調整に入る予定である。

４．シンポジウム

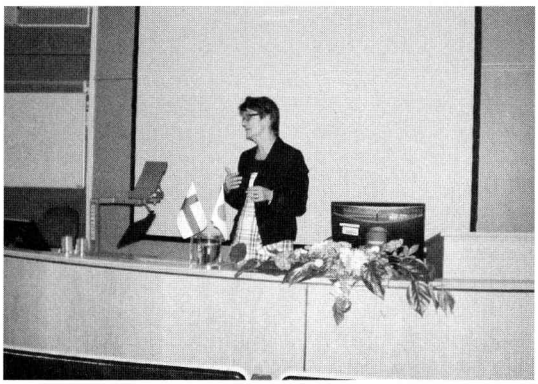
タンペレ応用科学大学と宮城大学看護学部との合同シンポジウムは９月３日に開催された。Markku Lahtinen学長よりオープニング挨拶のあと、本学の馬渡尚憲理事長により“The Future of the Partnership between TAMK and MYU”、をテーマにこれまでの両大学の交流の経緯を紹介しながら将来に向けての展望について講演があった。ひきつづき看護師でもあるPäivi Karttunen副学長が、“Overview of Nursing Education System in Finland and TAMK”をテーマに、大学および大学院での看護教育の概要について説明した。つづいて関戸好子教授が、“Overview of Nursing Education System in Japan and MYU”で、日本の看護教育と宮城大学における看護教育についての概要を示した。その後２つのセッションが開始され、両大学からそれぞれ４演題、合計８演題の発表があった。

セッション１は、“Issues involved in Linking Nursing Education and Clinical Practice”　のテーマのもと、宮城大学からは吉田俊子教授が“The Clinical Role and Issue for Cardiovascular Nursing in Japan –from the Aspect of Self Care Support”と北岡晃子准教授が“Music Therapy as an Alternative Medicine: A Japanese Perspective”を発表した。セッション２は、“Nursing Demands for the Elderly in the Aging Society”をテーマに行い、宮城大学からは長澤治夫教授が“Aging and Elderly Care – Welfare Strategies and Practice in Japan”と只浦寛子准教授が“Kinaesthetics in Elderly Health Care Setting”を発表した。両シンポジウムを通して、医療の相違や看護ケアの視点について活発な意見交換が行われた。

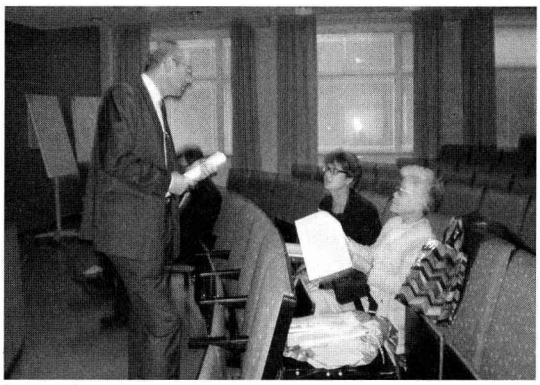
次回は、2012年11月に、宮城大学にてシンポジウムの開催を予定している。看護学部としても初めて海外での国際交流であり、教員や学生の交流、さらに共同研究など、今後の両学部の発展につながる成果を得ることができたと考える。



馬渡尚憲理事長・学長

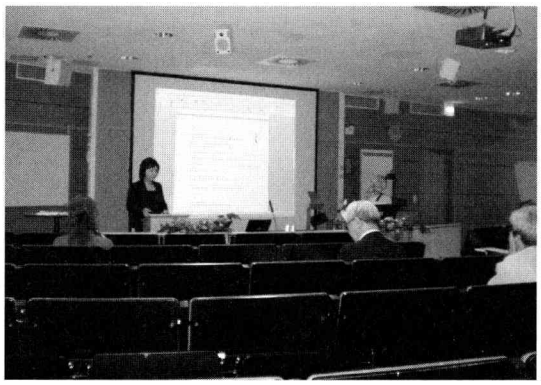


Päivi Karttunen副学長

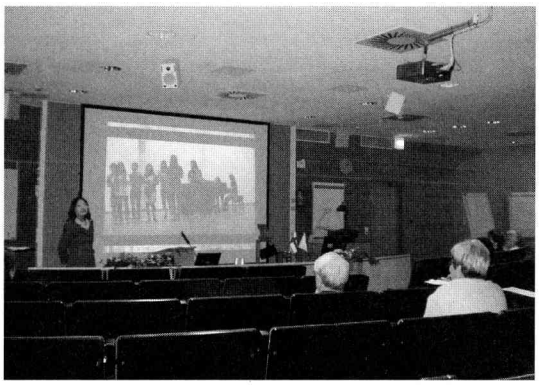


Markku Lahtinen学長、
Päivi Karttunen副学長、関戸好子教授

関戸好子教授



吉田俊子教授



北岡晃子准教授

長澤治夫教授

只浦寛子准教授

The Joint Symposium of TAMK and MYU
Main Theme: Challenges to Integrate Nursing Knowledge and Practice

Date: Friday 3rd September 2010
Venue: Tampere, Finland

Program
Moderators: Prof. H. Nagasawa MD. Miyagi University
PhD, Vice President Marja Sutela TAMK
9:00 - 9:30
Opening Remarks
Markku Lahtinen, president

The future of the partnership between TAMK and MYU
Shoken Mawatari, President, Miyagi University

9:30 - 10:00
Overview of nursing education system in Finland and TAMK
Päivi Karttunen PhD Vice President

10 :00 - 10:30
Overview of nursing education system in Japan and MYU
Yoshiko Sekito Ed.D., Professor, School of Nursing Miyagi University

Coffee break

10:45 - 12:45
Session 1 Issues involved in linking Nursing Education and Clinical Practice
Chairpersons: Prof. Yoshiko Sekito Ed.D. , Miyagi University
Principal Lecture Jouni TUomi, RN, PhD, TAMK

The Clinical Role and Issue of Cardiovascular Nursing in Japan - from the aspect of self care support
Toshiko Yoshida, RN,PHN,PhD. Professor, School of Nursing Miyagi University

About Possibilities to Go over Problems to Integrate Nursing Education and Practice in Curriculum Level
Jouni Tuomi PhD, Principal Lecturer

Ways to Integrate Clinical Practice with Theory
Pia Keiski, MNSc, Education Manager （adults nursing education）

Music Therapy as an Alternative Medicine : A Japanese Perspective
Akiko Kitaoka, Associate Professor, School of Nursing Miyagi University

12:45 - 13:45 Lunch

13:45 - 15:45
Session 2 Nursing Demands for the Elderly in the Aging Society
Chairpersons: Prof. Toshiko Yoshida, RN,PHN,PhD.
Principal Lecture Vaput Lipponen, RN, PhD, TAMK

Aging and Elderly Care - Welfare Strategies and Practices in Japan -
Haruo Nagasawa MD. Professor, School of Nursing Miyagi University

Ederly Care challenges to Nursing and Nursing Education
Varpu Lipponen, PhD Principal Lecturer

Kinaesthetics in Elderly Health Care Setting
Hiroko Tadaura, Associate Professor, School of Nursing Miyagi University

Active Ageing in Tampere Region: Joint Project between TAMK and Elderly Care Service Provides
Tarja Heinonen, Programme Manager, Wellbeing Services and Technology, R&D

Closing

Overview of nursing education system in Japan and MYU

Yoshiko Sekito, RN, Ed.D., Professor, School of Nursing Miyagi University

The modern Japanese nursing education had been developed only for less than 130 years. The development was a short time in history. The first modern nursing education in Japan had started in 1884, when Jikeikai Nursing School had invited Ms. Reed from U.S.A. to teach nursing. After wards, nursing schools were opened by Doshisha Hospital, Tokyo University Hospital, and Japan Red Cross. In 1904, St. Luke's hospital opened school of nursing and in 1920, it started R.N. education. By 1922, there were 60 nursing schools and 111 nurses. In 1929, Japan Nursing Association was established. In 1937, Public Health Law was enacted and public health nurses were born. In 1938, National Health Insurance was agreed. In 1948, a Public Health Nurses/ Midwives/ Nurses Law was legislated and regulation for nursing schools were decided. In 1950, 1st National Board of Nursing Examination was held. In 1952, 1st university nursing education set at Kochi Women's University. In 1975, 1st School of Nursing was opened at Chiba University and in 1979 Chiba set up for a graduate program. In 1980, St. Luke's also set up for a graduate program. Unfortunately, university education for nursing was slow in Japan. After almost 40 years of 1st nursing education in university, there had been only 12 universities operated nursing program by1989. However, from 1990's nursing education in university (4 year program) caught upward trends reflecting social perspectives of university education and by 2009 (latest data), there are 183 universities operate nursing programs.

Miyagi University started with 2 schools (inclusive of nursing) at April 1997, established by Miyagi prefecture. Since then, in 2005 one more school was added and became 3 schools. It's been 13years and produced over 4000 graduates. The School of Nursing then opened master program in 2001 and a doctoral program this year (2010). Presently, School of Nursing has over 400 undergraduate and graduate students. At this symposium, I'd present current nursing education in Japan. And further, present essence and identity of nursing education at MYU.

The Clinical Role and Issue of Cardiovascular Nursing in Japan - from the aspect of self care support

Toshiko Yoshida, RN,PHN,PhD. Professor, School of Nursing Miyagi University

Cardiovascular disease (CVD) is the second leading cause of death in Japan. Recently, treatment during the acute phase has become minimally invasive and the length of hospitalization has been shortened. However, the increasing number of future heart failure patients with underlying ischemic heart disease has caused some concerns.

In addition, CVD patients often have seen elderly patients with multiple diseases, and patients with mild diseases who seriously need long-term self-control.

In 2008, we conducted a survey to investigate what kind of patient education is being performed in cardiovascular nursing practice in Japan. Answers were obtained from 416 institutions. Eighty-one percent of all surveyed hospitals had some educational programs for CHD patients. Also, 76% of all surveyed hospitals reported that nurses had important roles in educational programs, but only 8% of them had CHD educational skills training programs for nurses. This survey demonstrated that continuous educational programs for CHD patients and educational skills training programs for nurses are poorly implemented.

Therefore, we have conducted a new health educational system on nursing support of patients with CVD by remote monitoring. We conducted a preliminary study on healthy subjects, and we will progress by introducing self-care for patients with CVD this September. Patients receive the educational contents on the Internet, and make daily diary entries, which become the contents of an interactive system with health professionals. Biological data such as pulse rate, pedometer measurements, exercise calories, exercise time, intensity and duration are saved by a sensing system.

In order to utilize these programs, management by a nursing professional is also important. In Japan, we have 19 nurse specialist certification areas and 10 clinical nurse specialty areas (CNS). Unfortunately, we did not have the nursing qualifications that specialized in CVD area. Given these facts, the Japanese Association of Cardiovascular Nursing applied for nurse certification in chronic heart failure. From April 2011, professional training will be provided in that field.

Nurses have many responsibilities for CVD disease managements. It is important to develop nursing methods, skills and improve nursing quality for continuous CVD patient support.

Music Therapy as an Alternative Medicine : A Japanese Perspective

Akiko Kitaoka, Associate Professor, School of Nursing, Miyagi University

The alternative medical systems of mind-body interventions, biologically based therapies, manipulative and body-based methods and the so-called energy therapies are the major types of complementary and alternative medicine. These systems are practiced in the well-known fields of acupuncture, moxibustion, yoga, tai-chi, digital compression therapy (shiatsu), traditional Chinese herbal medicine, and qigong therapy (deep breathing exercises) . In Japan, balneotherapy (hot spring cures) has become a popular alternative medicine. Most of these treatments are paid for by the patient and not covered by medical insurance plans, but their use is continuously increasing in the health-care market.

Music therapy has been defined as the clinical and evidence-based use of music interventions to accomplish individualized goals within a therapeutic relationship, and can be characterized within alternative medicine as one of the mind-body interventions. Music therapy has a supplemental affect in addition to the usual treatments against diseases. In the area of internal medicine, music therapy can be useful and applicable to many kinds of diseases. The most common applications have been with digestive ulcers, NUD (non-ulcer dyspepsia), bronchial asthma, chronic pancreatitis, simple obesity, diabetes mellitus, Basedow's disease, chronic dialysis, blood donation, end-state malignant disease, rehabilitation after a cerebral vascular accident, endoscopic examination, easy sleeping, and reduction of pain.

Japanese music therapy developed rapidly during the 1990s and early 2000s. This rapid development has however, not matured in terms of development and identity. Therefore, Japanese music therapy has been influenced by social environment, social welfare, and the music scene. Since the early 2000s Japanese music therapy has grown, by the force of circumstances, it is slowly approaching a transitional period for further development. To achieve a smooth transition, music therapists have to adapt to both societal and clients' needs. Japanese music therapists are required to use extremely complex insights, as they are challenged by the task to meet the people through music in diverse and transitional cultural layers. The Japanese tend to deepen their existence by remaining silent, and to communicate expressively by keeping this silence. We know that music has a great potential as a nonverbal medium, and thus, this Japanese characteristic creates a unique phenomenon of expression.

At the end of my presentation, I will show some videos of the rehabilitation program being experimented at ALS (motor neuron disease) care center, in The Miyagi National Hospital. We have invented a music therapy which uses voice training for ALS patients, and respiratory rehabilitation therapy. Music is part of all our lives. I would like to promote public awareness of the benefit of music therapy and access to music in Japanese modern life.

Aging and Elderly Care – Welfare Strategies and Practices in Japan –

Haruo Nagasawa, M.D. Professor, Miyagi University School of Nursing

In Japan, we are faced with both economic and population crises now.

The mean life span continues to grow over 30 years during the last 60 years after the Second World War in main countries around the world. The mean life span of Japanese females is now 86 and it is the highest in the world. It is predicted that the mean life span of Japanese will continue to grow in the future and that females will live to be nearly 90 years old by 2050. On the other hand, there has been a trend toward a decrease in the number of babies and in birth rates during the same periods. It is predicted that there will be quite a big difference between the decrease of birth and increase of death rates in the future. As a result of these facts, the population pyramid of Japan will be unusually changed. The total population will continue to decrease and the rate of the aged population over 65 years old will increase from 21 to 41%; those over 75 will particularly increase from 9 to 27% by 2050. These facts mean that the rate of the retired population and the labor population will be almost equal in the future. This will accelerate the population crisis in Japan. We are sure Japanese society is rapidly progressing to become the world's most aged society.

We must realize this and think about how to supply medical care and welfare services for the elderly in Japan. Today I will especially talk about the problems of cost and manpower in a highly aged society.

First of all, where do elderly people receive the terminal care at the last stages of their life before they die? More than 80% of people in Japan died in hospitals; only 12% died at home. Generally, the most common cause of death is cancer with more than 30% dying of the disease. Especially, for patients suffering from cancer, 90% die in medical facilities including palliative wards and hospice. Only a few % die at home. Otherwise, the death rate of those in nursing-care facilities for the elderly is quite low.

This fact is one of main reasons why total medical costs continue to grow rapidly.

If a patient with cancer stays in a palliative ward or hospice taking terminal medical-care and dies at a hospital, the cost is 1,140,000 yen per month (9,500 € / month, 1 € =120 yen) . Most are these costs are covered only by medical insurance. On the other hand, for a patient with cancer who stays at home taking palliative care, and who dies at home, the cost is 450,000 yen per month (3,750 € / month, 1 € =120 yen) . Most of these costs are covered by medical and nursing care insurance. These facts mean 60% of all costs are reduced for someone at home compared of someone in hospital.

Recently the Japanese government has decided to improve some medical and welfare policies in order to reduce total medical costs for the elderly. The two main challenges were how to shorten the length of time patients spend in hospital and how to improve services for people receiving care at home, for example improving visiting medical teams and home help services.

Another challenge was how to transfer care capacity from hospitals to nursing care facilities where insurance costs are less. These policies seen to be working, because my research shows the numbers of death at home and at nursing-care facilities have begun to increase dramatically.

Another major problem is the lack of manpower in caregivers for those elderly who need care in their daily life. The discrepancy between the number of caregivers and the aged persons who need nursing-care is large and the domestic employment situation will continue to deteriorate in the future. Being a caregiver (care workers, home helpers, etc) is not an attractive job for Japanese young people due to its rather low

salary and hard works.

In order to supply caregivers for the elderly, the Japanese government has recently decided to invite nursing-care workers and nurses from Asian countries under a bilateral economic partnership agreement. It is very attractive for foreign workers to earn the same salary as Japanese and a good opportunity to get a professional job legally in Japan. Last summer, 104 Indonesian nurses came to Japan. In addition to those nurses, about 450 nursing-care workers and nurses from the Philippines are scheduled to come in order to fill jobs at health-care facilities for the elderly. This fact represents a new openness in Japanese society, which up until now has not had a very open labor market for foreigners

We must continue to challenge ourselves to produce some new solutions that will help us address the coming highly aged society.

Kinaesthetics in Elderly Health Care Setting

Hiroko Tadaura, Associate Professor, School of Nursing Miyagi University

Many elderly people need support in their daily lives-----ADL (activities of daily living). Transferring from one point to another and also changing of their positions need support as well. These activities involve complex movements. Often the nurses who support the elderly who have movement disabilities get physical and mental strain. Many studies suggest how nurses can decrease the physical strain by ergonomical technique. However, the view is usually focused on the care giver side------how they can efficiently and ergonomically transfer the elderly from one position to another. Just like the nurses, the elderly get physical strain as well. We are living things. Our bodies have life system. This must never be forgotten specially when we are taking care of the elderly. It is essential in the promotion of health and wellness of elderly in the health care setting.

Today, I would like to focus on a new concept called KINAESTHETICS. Kinaesthetics (English) Kinästhetik (German) * is concept related to movement, sense and awareness. It was introduced in 1980's and has been developed since then in some German speaking countries. This is also understood as a learning system base on both ideas and approaches. The nursing approach uses Kinaesthetics systematically which applies the fundamental and natural human movement for self control and functions of living system and health development. The theoretical bases are: behavioral cybernetics, humanistic psychology and modern dance. It has been reported that nurses who have learned Kinaesthetics fundamentally understand the natural human movement, its meaning and human existence. They promote perception of their own body system and efficient harmony with the environment and daily life. The way they handle the elderly and how they support them when transferring have changed. The application has progressed a lot due to the non performance of "lifting". Thus, both the elderly and the nurses involved in the process feel more comfortable and less physical strain. Moreover, resulting easy movement for both parties (the elderly and the nurses) . The approach varies according to what disabilities the elderly has.

It has also been reported that Kinaesthetics is as good as rehabilitation. Unfortunately to date, although we have witnessed lots of positive practical experiences there are not many scientific evidence of the effect of Kinaesthetics.

Please let me present to you today ---- "WHAT IS KINAESTHETICS"> And its outcome. Kinaesthetics have many concepts but today, please let me focus on the"ENVIRONMENT". Proper environment contributes significantly to self control and health promotion of the elderly in a health care setting.

*PFLEGE HEUTE : Urban & Fischer Verlag, München in Germany, 496-512, 689, 2007.